

# PATENT ABSTRACTS OF JAPAN

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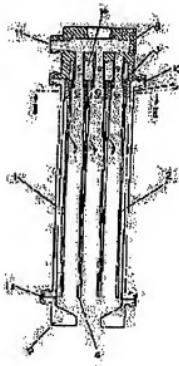
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## (54) HOLLOW FIBER MEMBRANE MODULE

### (57)Abstract:

**PURPOSE:** To obtain a hollow fiber membrane module capable of easily protecting bundle of hollow fiber membrane from swinging, etc., without substantially decreasing the effective area of the membrane by providing projectingly porous or many-opening cylindrical buffer body toward the passage hole of original liquid in the partition wall to the bundle of the hollow fiber membranes.



**CONSTITUTION:** In the membrane modules which the bundle 2 of the hollow fiber membrane is housed in a casing 1, the end part of the bundle 2 is supported in the casing 1 by the partition wall 5 having a passage hole 6 of an original liquid and the end part of the each hollow fiber membrane is opened against the surface of the partition wall 5, and the other end part of the bundle 2 is made free and the other end of the each hollow fiber membrane is closed, the porous or many-opening cylindrical buffer body 7 is provided projectingly in the bundle 2 from the passage hole 6 of the partition wall 5. By this constitution, the part of the bundle 2 is supported in the vicinity of the partition all 5 by projecting cylindrical buffer body 7, and in the case of swinging the hollow fiber membrane, cylindrical buffered body 7 is became to be elastic deformation opposedly and swinging is suppressed and to prevent the breakage of the membrane.